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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,348	09/24/2003	Peter C. Williams	22188/06726	2347

24024 7590 10/04/2005

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EXAMINER

HEWITT, JAMES M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/605,348	Applicant(s) WILLIAMS ET AL.	
	Examiner James M. Hewitt	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/25/05 & 7/19/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/22, 3/11 & 7/15</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

Applicant's election of Species I in the reply filed on 4/25/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Applicant is correct in his assertion that all claims are readable on the elected species.

Information Disclosure Statement

The information disclosure statement filed 3/11/05 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of non-English reference NL 6710340. This reference therefore has not been considered.

Drawings

The drawings are objected to because: reference numeral "22" should be shown in Figure 2; should Figures 6-7 be labeled 'Prior Art'?; reference numeral "128" should be shown in Figures 24A-G. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the

application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the ferrule having a substantially continuous cylindrical interior wall in combination with a convex driven surface as claimed in claim 6 must be shown or the feature cancelled from the claim. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

In paragraph [0001], the patent number corresponding to application 09/469,549 should be provided.

In paragraphs [0044] and [0048], "FIGS. 2" is incorrect.

In paragraph [0057], lines 1-3, it is unclear as to how Figures 8-9 can be said to show another modified rear ferrule when Figures 8-9 are said to show the same rear ferrule as in Figure 5.

Appropriate correction is required.

Claim Objections

Claims 2-5, 10-20, 23-25, 31 and 37 are objected to because of the following informalities:

The term "toggle-like hinging action" is objected to since the normal use of the word "toggle" is to move back and forth repeatably. This is not the case of the ferrule as once it is deformed inward by the drive member it does not toggle back at any time even if the drive member is removed. The action maybe termed as "hinging" but to term the radially inward deformation as "toggle-like" appears to be incorrect.

Claim 27 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 27 recites a recess in the interior wall of the ferrule, yet claim 21, from which claim 27 depends, clearly recites that the interior wall is a substantially continuous cylindrical wall and as such claim 27 does not further limit claim 21, and rather contradicts claim 21.

Claims 32-35 and 38 are objected to because of the following informalities:

Claims 32-35 should depend from claim 31 and not from claim 1.

Claim 38 should depend from claim 37 and from claim 7.

Appropriate correction is required.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-11, 13-14, 16, 18-19, 21, 23-24, 26, 28, 31-32 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Teeters (US 3,215,457).

Teeters discloses a tube fitting including a fitting body 2 having cylindrical bore (see fig. 1) for receiving a tube end 1 and including a tapered mouth 5 at one end of the bore (see fig. 1) and a drive member 4 having a threaded engagement 3 with the body 2 and having a ferrule drive surface 23, a first ferrule 8 having a tapered first end 13 that extends into the tapered mouth 5 of the fitting body 2 and having a second end 15 with a tapered recess 16 that axially extends toward the first end and a second ferrule 11 having a continuous cylindrical interior wall, a tapered nose 25 that extends into the tapered recess 16 of the first ferrule 8, and a driven surface 23 on a back end thereof that engages the drive member 4 ferrule drive surface 24, the second ferrule driven surface 23 having a generally convex contour (see figs. 2,3,6 or 7); the second ferrule 11 contoured driven surface 23 inherently reduces force concentrations on the drive member ferrule drive surface 23 when the fitting is pulled up just as in the present invention due to the alike structures of the present invention and the Teeters device. A rear portion of the second ferrule cylindrical interior wall 11 is radially spaced from the

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tube end (see fig. 3) after the fitting is pulled up. Upon pull up of the fitting as shown in fig. 3 the second ferrule back end is radially spaced from the tube end and a forward edge portion of the second ferrule nose 25 penetrates an outer surface of the tube end and the ferrule nose 25 has a convex portion that is radially compressed to collet the tube end 1 near the forward edge. The convex portion is adjacent and joins and is contiguous with the forward edge portion and thereby inherently isolates the forward edge portion from pipe vibration. The Teeter coupling further teaches a method of forming a sealing tube grip on the tube 1 end during pull up of the two ferrule tube fitting of the type having a front ferrule 8 and a rear ferrule 11 axially driven together by a threaded nut 4 and body 2 using the steps of radially compressing a nose portion 25 of the rear ferrule 11 to penetrate an outer surface of the tube end to inherently form a stress riser in the way of a indent in the tube that resists axial movement of the tube end 1 relative to the rear ferrule 11 and forming a convex portion 25 of the rear ferrule 11 by radial compression in an area axially adjacent the stress riser and producing a radial space (see fig. 3) between a back end portion of the rear ferrule and the tube end. The ferrule front end has an internal cylindrical portion that is radially compressed to collet the tube and near the forward edge portion. The radially compressed cylindrical portion of the ferrule is convex at it tip end and adjacent and adjoining and contiguous with the forward edge portion, further the convex portion isolates the forward edge portion from vibration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, 12, 17, 22, 25, 33 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teeters (US 3,215,457) in view of Kreidel (US 2,171,217) or Kreidel (US 2,230,116).

Teeters teaches all the limitations of claims 1-6, 8, 12, 17, 22, 25, 33, 36 and 37 and described above in the 102 rejection, except that the second ferrule is case hardened over substantially its entire surface. The patent 2,171,217 to Kreidel and 2,230,116 to Kreidel both disclose that it is known in the prior art to provide a similar type coupling with the ferrule 10 of Kreidel '217 and the ferrule b of Kreidel '116 being case hardened (see Kreidel '217 page 2, column 1, lines 65-75 continuing to column 2, lines 1-10 and Kreidel '116 page 1, column 2, lines 15-50) in order to properly bite into the inserted tube. It would have been obvious to one having ordinary skill in the art at the time the invention was made to harden the biting, second ferrule of Teeters as taught in the prior art of either Kreidel '217 or Kreidel '116, in order to provide a more secure coupling for the inserted tube due to increased compressibility of the ferrule into the surface of the softer inserted tube and thereby insuring a steadfast connection.

Claims 27, 30 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teeters (US 3,215,457) in view of French patent 1,170,298.

Teeters teaches all the limitations of claims 27, 30 and 34 as described above in the 102 rejection except for the particular structure of the ferrule having a radial recess along its inner surface. The French coupling discloses in fig. 3 that it is known in the art to provide a similar type coupling with a radial recess along the inner surface of the ferrule in order to aid in bending and bite into the inserted tube. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the ferrule of Teeters with a recess as taught by the French patent, in order to provide a more secure coupling for the inserted tube due to increased compressibility of the ferrule into the surface of the inserted tube.

Claims 15, 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teeters (US 3,215,457) in view of Schwarz (US 4,304,422).

Teeters teaches all the limitations of claims 15, 20 and 29 as described above in the 102 rejection except for the particular material of the ferrule being stainless steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the ferrule from a well known corrosion resistance material such as stainless steel such as disclosed by Schwarz in column 4, line 47 that it is known in the art to construct a similar type ferrule in a similar type coupling from stainless steel in order to improve the couplings resistance to corrosion and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of

its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teeters (US 3,215,457) in view of Kreidel (US 2,171,217) or Kreidel (US 2,230,116) as applied to claim 1 above, and further in view of French patent 1,170,298.

Teeters teaches all the limitations of claim 7 as described above except for the particular structure of the ferrule having a radial recess along its inner surface. The French coupling discloses in fig. 3 that it is known in the art to provide a similar type coupling with a radial recess along the inner surface of the ferrule in order to aid in bending and bite into the inserted tube. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the ferrule of Teeters with a recess as taught by the French patent, in order to provide a more secure coupling for the inserted tube due to increased compressibility of the ferrule into the surface of the inserted tube.

Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teeters (US 3,215,457) in view of Kreidel (US 2,171,217) or Kreidel (US 2,230,116) as applied to claim 8 above, and further in view of Schwarz (US 4,304,422).

Teeters teaches all the limitations of claim 9 as described above except for the particular material of the ferrule being stainless steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the ferrule

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from a well known corrosion resistance material such as stainless steel such as disclosed by Schwarz in column 4, line 47 that it is known in the art to construct a similar type ferrule in a similar type coupling from stainless steel in order to improve the couplings resistance to corrosion and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

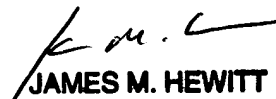
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JAMES M. HEWITT
PRIMARY EXAMINER